

WHAT IS CLAIMED IS:

1. A system, comprising:
  - a housing;
  - a common receiver part, associated with said housing, including at least a receiver array;
  - a plurality of interface assemblies, each interface assembly sized for receiving a transmitter part which have outer surfaces sized for allowing said transmitter part to slide into place within said housing, and which can be selectively inserted and removed from said receiver part, said housing including common circuitry operating to drive said interface assemblies, and said housing including slide portions which guide said surfaces of each interface assembly into a location and allow connection to said interface assembly, and which allow said interface assemblies to be selectively slid into place and connected and subsequently removed, each said interface assembly including its own heat sink portions, associated with transmitter circuitry on the interface assembly, which operate to dissipate heat from the interface assembly.

2. A system as in claim 1, wherein said plurality of interface assemblies are wavelength division multiplexed transmitters.

3. A system as in claim 2, wherein said transmitters may transmit at different frequencies.

4. A system as in claim 1, wherein said common receiver part includes receiver driving circuitry.

5. A system as in claim 1, wherein said interface assemblies include transmitters including a first transmitter which transmits at a first frequency, and a second transmitter which transmits at a second frequency.

6. A system, comprising:

a housing, including a wave locker and receiver complements, operating to receive signals, and having a plurality of transmitter connection locations, each of said transmitter connection locations including surfaces which are adapted to hold a removable transmitter into place, and including a connector, which provides power and receives signals from a connected transmitter; and

a plurality of different removable transmitter

assemblies, having outer surfaces which are sized for connection to said surfaces of said housing, and receiving power from said connector, carrying out a transmitting operation, and providing signal to said connector, each of said transmitter assemblies including heat dissipating elements, and said housing sized such that each two adjacent transmitter assemblies are spaced by a predetermined amount.

7. A system as in claim 6, wherein at least a plurality of said different removable transmitter assemblies operate at a different frequency.